

Application Number 10/730,878
Responsive to Office Action mailed February 20, 2007

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Previously Presented): An implantable medical device comprising:

at least two interconnected modules, each of the modules comprising a respective one of at least two housings; and

an overmold that at least partially encapsulates each of the housings, the overmold comprising a lead connection module configured to accept an external lead.

Claim 2 (Original): The implantable medical device of claim 1, wherein at least one module comprises a control module containing electronic components.

Claim 3 (Currently Amended): The implantable medical device of claim 1, wherein the overmold comprises a first material and a second material, and the lead connection module is embedded deployed within the first material.

Claim 4 (Original): The implantable medical device of claim 3, wherein the first material comprises a non-elastomeric material.

Claim 5 (Original): The implantable medical device of claim 1, the lead connection module comprising at least one feed-through wire to electrically couple an external lead to an electronic component within the implantable medical device.

Claim 6 (Original): The implantable medical device of claim 1, wherein the lead connection module includes a mechanical lead securing mechanism.

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Claim 7 (Original): The implantable medical device of claim 6, wherein the mechanical lead securing mechanism comprises a tool-less mechanical lead securing mechanism.

Claim 8 (Original): The implantable medical device of claim 1, wherein the implantable medical device has a maximum thickness of between approximately 4 millimeters and approximately 8 millimeters.

Claim 9 (Currently Amended): An overmold for a modular implantable medical device that includes a plurality of modules, each of the modules comprising a respective housing, the overmold comprising:

- a first material configured to hold at least part of the housing of one of the modules;
- a second material coupled to the first material; and
- a lead connection module configured to accept an external lead, the lead connection module being embedded ~~deployed~~ within the overmold.

Claim 10 (Original): The overmold of claim 9, wherein the first material comprises a non-elastomeric material.

Claim 11 (Original): The overmold of claim 9, wherein the second material comprises an elastomeric material.

Claim 12 (Original): The overmold of claim 9, wherein the second material comprises silicone.

Claim 13 (Currently Amended): The overmold of claim 9, wherein the lead connection module is embedded ~~deployed~~ within the first material.

Claim 14 (Original): The overmold of claim 9, wherein the lead connection module is configured to receive an iso-diametric external lead.

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Claim 15 (Previously Presented): The implantable medical device of claim 1, wherein the housings are horizontally distributed at respective locations of the overmold, and separately encapsulated by the overmold.

Claim 16 (Previously Presented): An implantable medical device comprising:
at least two interconnected modules, each of the modules comprising a respective one of at least two housings; and
an overmold that partially encapsulates each of the housings and defines a frame configured to fix a position of the at least two interconnected modules relative to one another, the overmold comprising a lead connection module configured to accept an external lead.

Claim 17 (Previously Presented): The implantable medical device of claim 16, wherein the overmold comprises an non-elastomeric material.

Claim 18 (Previously Presented): The implantable medical device of claim 16, wherein the overmold comprises an elastomeric material.

Claim 19 (New): The implantable medical device of claim 1, wherein at least one of the at least two housings is hermetically sealed.

Claim 20 (New): The overmold of claim 9, wherein at least one of the respective housings is hermetically sealed.